

AMENDMENTS

Please amend the claims as follows:

1 - 23. (cancelled).

24. (previously presented) A method for enhancing communication in a noisy environment comprising:

- receiving input signals emanating from at least two microphone arrays each comprising at least two microphones; and

- processing the input signals of each microphone array by an adaptive wanted signal beamformer and a blocking beamformer, the processing comprising:

- determining temporal and spatial information about the input signals of each microphone array;

- obtaining a wanted signal from the adaptive wanted signal beamformer;

- obtaining a blocking signal from the blocking beamformer; and

- deciding whether a signal is transmitted from a wanted signal direction, the deciding comprising:

- determining a wanted signal power; and

- determining a blocking signal power,

- wherein the adaptive wanted signal beamformer is adapted only if no signal is transmitted from the wanted signal direction, which is determined as when the blocking signal power is larger than a predetermined constant times the wanted signal power.

25. (previously presented) The method of claim 24, further comprising detecting speech activity for each microphone array.

26. (previously presented) The method of claim 25, wherein detecting speech activity for a microphone array comprises:

determining a wanted signal power, a blocking signal power, and a background noise signal power, comparing the wanted signal power with the blocking signal power and the background noise signal power.

27. (previously presented) The method of claim 26, further comprising comparing the wanted signal powers of at least two microphone arrays and determining a highest power.

28. (previously presented) The method of claim 25, further comprising applying an attenuation to the processed input signals of a microphone array if no speech activity is detected for the microphone array.

29. (previously presented) The method of claim 28, wherein applying the attenuation is performed adaptively, preferably by varying the attenuation in predetermined time steps between zero attenuation and a predetermined maximum attenuation.

30. (previously presented) The method of claim 24, wherein processing comprises determining a gain control of the input signals for each microphone array.

31. (previously presented) The method of claim 30, wherein determining a gain control is performed adaptively.

32. (previously presented) The method of claim 24, further comprising selecting at least one output channel out of at least two output channels on which the processed signals are to be output.

33. (previously presented) The method of claim 32, wherein selecting the at least one output channel comprises determining an amplification for each selected output channel.

34. (previously presented) A communication system comprising:

- at least two microphone arrays each comprising at least two microphones to produce microphone signals;

- at least one analog/digital converter having an input for receiving said microphone signals and an output for providing digital microphone signals;

- a digital signal processor having an input for receiving the digital microphone signals, the digital signal processor configured to:

 - process the digital microphone signals of each microphone array by an adaptive wanted signal beamformer and a blocking beamformer, the processing comprising:

 - determining temporal and spatial information about the microphone signals of each microphone array;

 - obtaining a wanted signal from the adaptive wanted signal beamformer;

 - obtaining a blocking signal from the blocking beamformer; and

 - deciding whether a signal is transmitted from a wanted signal direction, the deciding comprising:

 - determining a wanted signal power; and

 - determining a blocking signal power,

 - wherein the adaptive wanted signal beamformer is adapted only if no signal is transmitted from the wanted signal direction, which is determined as when the blocking signal power is larger than a predetermined constant times the wanted signal power; and

 - provide processed output signals to at least two loudspeakers.

35. (previously presented) The communication system of claim 34, wherein the digital signal processor is further configured to select at least one loudspeaker out of the at least two loudspeakers on which the processed signals are to be output.

36. (previously presented) A vehicular cabin comprising a communication system according to claim 34 and at least two loudspeakers, wherein each microphone array and each loudspeaker is associated with a passenger seat.